

CLAIMS:

SUBA? > 1. A network with several network clusters of at least one wireless network node each, which network node is designed for the wireless transmission of packets in time slots of given length in a time multiplex process, the variable length of said packets having at least a value which is smaller than the length of a fixedly given time slot,

5 characterized in that a wireless network node is provided for combining several packets into a superpacket and for transmitting the superpacket to all wireless network nodes authorized for the data transmission via a point-to-multipoint link, and
10 in that a wireless network node after reception of a superpacket is designed to derive a packet from the superpacket if the destination of the packet lies in the relevant associated network cluster.

2. A network as claimed in claim 1, characterized in that a wireless network node
- is designed for segmenting a superpacket into cells when the length of the superpacket exceeds the length of the fixedly given time slots,

15 - is designed for inserting the cells into several time slots, and
in that a wireless network node which receives cells is designed for forming a superpacket from received cells.

SUBA? > 3. A network as claimed in claim 2, characterized in that a wireless network node
20 is designed for inserting the cells into several time slots of a frame or into one or several time slots of several frames.

4. A network as claimed in claim 1, characterized in that one of the wireless network nodes from among the wireless network nodes which form a wireless network is
25 constructed so as to form a central node which is designed to control the radio traffic.

5. A network as claimed in claim 1, characterized in that a wireless network node which receives a packet is designed for comparing the address identification in the control

field of the packet with an address which belongs to the associated network cluster and which identifies the destination.

6. A network as claimed in claim 5, characterized in that a wireless network node
5 contains a table for the storage of all addresses of the associated network cluster.

7. A network as claimed in claim 1, characterized in that the network comprises a
management system which for certain applications controls a wireless network node such that
this node provides the establishment of point-to-point connections only instead of point-to-
10 multipoint connections.

8. A network as claimed in claim 7, characterized in that a wireless network node
is designed for sending a key via a point-to-multipoint connection and for sending coded data
via a point-to-point connection.

9. A wireless network node in a network cluster of a network, which node is
designed for the wireless transmission of packets in time slots of given length in a time
multiplex process, the variable length of said packets having at least a value which is smaller
than the length of a fixedly given time slot,
15 characterized in that the wireless network node is designed for combining several packets into
a superpacket and for transmitting said superpacket via a point-to-multipoint connection to all
wireless network nodes authorized for the data transmission.

10. A wireless network node in a network cluster of a network, which node is
25 designed for the wireless reception of packets in time slots of given length in a time multiplex
process, the variable length of said packets having at least a value which is smaller than the
length of a fixedly given time slot
characterized in that the wireless network node is designed so as to derive a packet from a
superpacket after reception of this superpacket if the designation of the packet lies within the
30 relevant associated network cluster.

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